

## Safety Attribute Inspection (SAI) Data Collection Tool

### 3.1.10 Lower Landing Minimums (LLM) (OP)

#### ELEMENT SUMMARY INFORMATION

**Purpose of this Element** (certificate holder's responsibility):

- To safely land the aircraft at the specified Lower Landing Minimums (LLM) as authorized in the certificate holder's operations specifications and the Federal Aviation Regulations.

**Objective** (FAA oversight):

- To determine if the certificate holder's Lower Landing Minimums (LLM) process meets all applicable requirements of Title 14 of the Code of the Federal Regulations (14 CFR) and FAA policies.
- To determine if the certificate holder's Lower Landing Minimums (LLM) process incorporates the safety attributes.
- To identify any shortfalls in the certificate holder's Lower Landing Minimums (LLM) process.

**Specific Instructions:**

- Intentionally left blank

#### SUPPLEMENTAL INFORMATION

**Specific Regulatory Requirements (SRRs):**

- SRRs:
  - 119.43(b)
  - 119.43(b)(1)
  - 119.43(b)(2)
  - 119.43(c)
  - 121.135(a)(1)
  - 121.135(b)(1)
  - 121.135(b)(2)
  - 121.135(b)(3)
  - 121.579(b)
  - 121.579(b)(1)
  - 121.579(b)(2)
  - 91.189(g)
  - C.059
  - C.060

**Related CFRs & FAA Policy/Guidance:**

- Related CFRs:
  - Intentionally left blank
- FAA Policy/Guidance:
  - Advisory Circular 120-28D
  - Advisory Circular 120-29A
  - HBAT 05-02A

### SAI SECTION 1 - PROCEDURES ATTRIBUTE

**Objective:** Procedures, instructions, and information contained in the certificate holder's manual are documented methods for accomplishing a process. Policies contained in the certificate holder's manual should establish the certificate holder's compliance posture. Policies may not be stand-alone statements but may be imbedded within procedures, instructions, or information regarding a particular regulatory requirement. The questions in this section of the data collection tool (DCT) are designed to assist the inspector in determining if the certificate holder's manual has documented or prescribed methods of accomplishing the process requirements that provide answers to the associated questions regarding who, what, when, where, and how. This section contains policy questions, procedural questions, and instructional or informational questions pertaining to various types of certificate holder requirements such as actions, prohibitions, or resources (i.e., personnel, facilities, equipment, technical data, etc.).

#### Tasks

	To meet this objective, the inspector must accomplish the following tasks:
1.	Review the information listed in the Supplemental Information section of this DCT.
2.	Review the duties and responsibilities for management and other personnel identified by the certificate holder who accomplish the Lower Landing Minimums (LLM) process.
3.	Review the certificate holder's manual to ensure that it contains policies, procedures, instructions, and information necessary for the Lower Landing Minimums (LLM) process.

#### Questions

	To meet this objective, the inspector must answer the following questions:	
1.	Does the content of the certificate holder's manual meet the specific regulatory and FAA policy requirements for a Lower Landing Minimums (LLM) process:	
1.1.	<p>Does the certificate holder's manual allow Cat II or CAT III operations only when it is authorized in its operations specifications?</p> <p>SRRs: 91.189(g)</p> <p><i>Related Design JTIs:</i></p> <ol style="list-style-type: none"> <li>1. Check that the Certificate Holder's manual system contains instructions and information to ensure no person may operate a civil aircraft in a Category II operation conducted by the holder of a certificate issued under part 121 of this chapter unless the operation is conducted in accordance with that Certificate Holder's operations specifications. <i>Sources:</i> 121.135(a)(1); 91.189(g) <i>Interfaces:</i> 1.3.5(AW); 3.1.3(OP); 3.1.4(OP); 3.2.1(OP)</li> <li>2. Check that the Certificate Holder's manual system contains instructions and information to ensure no person may operate a civil aircraft in a Category III operation conducted by the holder of a certificate issued under part 121 of this chapter unless the operation is conducted in accordance with that Certificate Holder's operations specifications. <i>Sources:</i> 121.135(a)(1); 91.189(g) <i>Interfaces:</i> 1.3.5(AW); 3.1.3(OP); 3.1.4(OP); 3.2.1(OP)</li> </ol>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.2.	Does the certificate holder's manual contain procedures that specify an autopilot will not be used at less than twice the altitude loss that is specified in the AFM or less than 50 feet below the MDA or DH, whichever is higher, except: SRRs: 121.579(b)	

1.2.1	At less than VFR, does the certificate holder's manual specify the autopilot will not be used with an ILS coupled approach at an altitude less than 50 feet higher than the maximum altitude loss for the airplane? SRRs: 121.579(b)(1)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable
1.2.2	When equal or better than VFR, does the certificate holder's manual specify the autopilot will not be used with an ILS coupled approach at an altitude less than the maximum altitude loss specified in the Airplane Flight Manual for the malfunction of the autopilot with approach coupler under approach conditions, or 50 feet, whichever is higher? SRRs: 121.579(b)(2)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable
1.3.	Does the certificate holder's Lower Landing Minimums (LLM) process comply with the guidance contained in FAA Flight Standards Handbook Bulletin HBA7 05-02A?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.4.	Does the certificate holder's Lower Landing Minimums (LLM) process comply with the guidance contained in Advisory Circular (AC) 120-28D? <i>Related Design JTIs:</i> 1. Check that the Certificate Holder's manual system incorporates the reference material from the Advisory Circular as applicable for that particular type of operation. <i>Sources:</i> 121.135(a)(1); AC-120-28D <i>Interfaces:</i> 1.2.6(AW); 1.3.1(AW); 1.3.2(AW); 1.3.5(AW); 1.3.6(AW); 1.3.8(AW); 1.3.9(AW); 1.3.10(AW); 1.3.11(AW); 1.3.14(AW); 1.3.19(AW); 2.1.1(AW); 2.1.1(OP); 2.1.3(AW); 2.1.3(OP); 2.1.4(AW); 2.1.4(OP); 3.1.3(OP); 3.1.4(OP); 3.1.9(OP); 3.2.1(OP); 3.2.3(OP); 4.2.3(OP); 4.2.7(OP); 4.2.9(OP); 4.3.1(OP); 4.3.2(OP); 4.3.3(OP); 7.2.1(OP)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable
1.5.	Does the certificate holder's Lower Landing Minimums (LLM) process comply with the guidance contained in AC 120-29A? <i>Related Design JTIs:</i> 1. Check that the Certificate Holder's manual system incorporates the reference material from the Advisory Circular as applicable for that particular type of operation. <i>Sources:</i> 121.135(a)(1); AC-120-29A <i>Interfaces:</i> 1.2.6(AW); 1.3.1(AW); 1.3.2(AW); 1.3.5(AW); 1.3.6(AW); 1.3.8(AW); 1.3.9(AW); 1.3.10(AW); 1.3.11(AW); 1.3.14(AW); 1.3.19(AW); 2.1.1(AW); 2.1.1(OP); 2.1.3(AW); 2.1.3(OP); 2.1.4(AW); 2.1.4(OP); 3.1.3(OP); 3.1.4(OP); 3.1.9(OP); 3.2.1(OP); 3.2.3(OP); 4.2.3(OP); 4.2.7(OP); 4.2.9(OP); 4.3.1(OP); 4.3.2(OP); 4.3.3(OP); 7.2.1(OP)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable
1.6.	Does the certificate holder's manual contain the required references to, or excerpts from, Operations Specifications, paragraphs C059 and C060? SRRs: 119.43(b); C.059; C.060	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.7.	If the certificate holder's manual includes excerpts from its operations specifications, are the excerpts clearly identified as part of the operations specifications? SRRs: 119.43(b)(1); C.059; C.060	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable
1.8.	Does the certificate holder's manual require compliance with Operations Specifications, paragraphs C059 and C060?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

	SRRs: 119.43(b)(2); C.059; C.060	
1.9.	Does the certificate holder's manual contain a method for keeping all persons engaged in its operations informed of the provisions of Operations Specifications, paragraphs C059 and C060? SRRs: 119.43(c); C.059; C.060	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
2.	Does the certificate holder's manual contain general policies for the Lower Landing Minimums (LLM) process that comply with the SRRs? SRRs: 121.135(b)(1)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
3.	Does the certificate holder's manual reference the appropriate Federal Aviation Regulations listed in the Supplemental Information section of this safety attribute inspection (SAI)? SRRs: 121.135(b)(3)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
4.	Does the certificate holder's manual contain the duties and responsibilities for personnel who will accomplish the Lower Landing Minimums (LLM) process? SRRs: 121.135(b)(2)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
5.	Does the certificate holder's manual include instructions and information for personnel to meet the requirements of the Lower Landing Minimums (LLM) process? SRRs: 121.135(a)(1)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

SAI SECTION 1 - PROCEDURES ATTRIBUTE Drop-Down Menu	
1.	No procedures, policy, instructions or information specified.
2.	Procedures or instructions and information do not identify (who, what, when, where, how).
3.	Procedures, policy or instructions and information do not comply with CFR.
4.	Procedures, policy or instructions and information do not comply with FAA policy and guidance.
5.	Procedures, policy or instructions and information do not comply with other documentation (e.g., manufacturer's data, Jeppesen's Charts, etc.).
6.	Procedures, policy or instructions and information unclear or incomplete.
7.	Documentation quality (e.g., unreadable or illegible).
8.	Procedures, policy or instructions and information inconsistent across Certificate Holder manuals (FOM - Flight Operations Manual to GMM - General Maintenance Manual, etc.).
9.	Procedures, policy or instructions and information inconsistent across media (e.g., paper, microfiche, electronic).
10.	Resource requirements incomplete (personnel, facilities, equipment, technical data).
11.	Other.

## SAI SECTION 2 - CONTROLS ATTRIBUTE

**Objective:** Controls are checks and restraints designed into a process to ensure a desired result. The questions in this section of the DCT are designed to assist the inspector in determining if checks and restraints are designed into the process to ensure the desired result is achieved. Controls should be written into the manual system to ensure that the most important manual policies, procedures, or instructions and information will be followed.

Controls may be in the form of administrative controls, which are secondary or supplemental written procedures. Like written procedures, administrative controls also need to provide answers to questions regarding who, what, when, where, and how. Controls may also be in the form of engineered controls, such as automated features or mechanical actions or devices (i.e., safety devices, warning devices, etc.).

### Tasks

To meet this objective, the inspector must accomplish the following tasks:

1. Review the control questions below.
2. Review the certificate holder's policies, procedures, instructions, and information to gain an understanding of the controls that it has documented.

### Questions

	To meet this objective, the inspector must answer the following questions:	
1.	Are the following controls built into the Lower Landing Minimums (LLM) process:	
1.1.	Is there a control or controls in place to ensure that the flightcrew conducts a thorough CAT II/III approach review before conducting the approach?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.2.	Is there a control or controls in place to ensure that high minimum captains who are dispatched into potential lower minimum approach weather conditions are given the proper restrictions?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.3.	Is there a control or controls in place to ensure that the flightcrew follows company procedures for LLM approaches based upon available equipment?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
2.	Does the certificate holder have a documented method for assessing the impact of any changes made to the controls in the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

SAI SECTION 2 - CONTROLS ATTRIBUTE Drop-Down Menu	
1.	No controls specified.
2.	Documentation for the controls do not identify (who, what, when, where, how).
3.	Controls incomplete.
4.	Controls could be circumvented.
5.	Controls could be unenforceable.
6.	Resource requirements incomplete (personnel, facilities, equipment, technical data).
7.	Other.

### SAI SECTION 3 - PROCESS MEASUREMENT ATTRIBUTE

**Objective:** Process measurements are used by the certificate holder to measure and assess its processes, to identify and correct problems or potential problems, and to make improvements to the processes. The questions in this section of the DCT are designed to assist the inspector in determining if the certificate holder measures or assesses information to identify, analyze, and document potential problems with the process. Process measurements are a certificate holder's internal evaluation or auditing of the most important policies, procedures, or instructions and information associated with an element.

To prevent the duplication of work, process measurements are most commonly addressed through a combination of auditing features contained in both the certificate holder's safety program/internal evaluation program (for operations and cabin safety-related issues) and the auditing function of the Continuous Analysis and Surveillance System (for airworthiness or maintenance/inspection-related issues). The director of safety and the quality assurance department often work together to accomplish this function for the certificate holder. This approach requires amendment of the safety program/internal evaluation program audit forms or checklists and the Continuous Analysis and Surveillance System audit forms or checklists to include the specific process measurements for each element.

#### Tasks

	To meet this objective, the inspector must accomplish the following tasks:
1.	Review the process measurement questions below.
2.	Review the certificate holder's policies, procedures, instructions, and information to gain an understanding of the process measurements that it has documented.

#### Questions

	To meet this objective, the inspector must answer the following questions:	
1.	Does the certificate holder's Lower Landing Minimums (LLM) process include the following process measurements:	
1.1	Is there a process measurement or process measurements that would identify if the flightcrew failed to conduct a thorough CAT II/III approach review before conducting the approach?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.2.	Is there a process measurement or process measurements that would identify if high minimum captains who were dispatched into potential lower minimum approach weather conditions were not given the proper restrictions?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.3.	Is there a process measurement or process measurements that would identify if the flightcrew failed to follow company procedures for LLM approaches based upon available operating equipment?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
2.	Is there a process measurement or process measurements that would reveal if the certificate holder's policy, procedures, instructions, and information contained in its manual were not followed?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
3.	Does the certificate holder document its process measurement results?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
4.	Does the certificate holder's manual provide for the use of process measurement results to improve its programs?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
5.	Does the organization that conducts the process measurements have direct access to the person with responsibility for the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain





<b>SAI SECTION 3 - PROCESS MEASUREMENT ATTRIBUTE</b> <b>Drop-Down Menu</b>	
1.	No process measurements specified.
2.	Documentation for the process measurements does not identify (who, what, when, where, how).
3.	Inability to identify negative findings.
4.	No provisions for implementing corrective actions.
5.	Ineffective follow-up to determine effectiveness of corrective actions.
6.	Resources requirements (personnel, facilities, equipment, technical data).
7.	Other.

### SAI SECTION 4 - INTERFACES ATTRIBUTE

**Objective:** Interfaces are used by the certificate holder to identify and manage the interactions between processes. The questions in this section of the DCT are designed to assist the inspector in determining whether or not interactions between the policies, procedures, or instructions and information associated with other independent processes within the certificate holder's organization are documented. Written policies, procedures, or instructions and information that are interrelated and located in different manuals within the certificate holder's manual system must be consistent and complement each other. For the interfaces to be effectively managed, it is not only important to identify what the interfaces are, but it is imperative to document the specific location of the interfaces within the certificate holder's manual system.

#### Tasks

	To meet this objective, the inspector must accomplish the following tasks:
1.	Review the interfaces associated with the Lower Landing Minimums (LLM) process that have been identified along with the individual questions in section 1, Procedures, of this DCT.
2.	Review the certificate holder's policies, procedures, instructions, and information to gain an understanding of the interfaces that it has documented.

#### Questions

	To meet this objective, the inspector must answer the following questions: NOTE: The design job task items (JTIs) displayed with the questions in section 1, Procedures, of this DCT identify potential interfaces (by element number) for this element.	
1.	Does the certificate holder's manual properly address the interfaces that are identified along with the questions in section 1, Procedures, of this DCT?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
2.	Does the certificate holder's manual document a method for assessing the impact of any changes to the associated interfaces within the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

<b>SAI SECTION 4 - INTERFACES ATTRIBUTE</b> <b>Drop-Down Menu</b>	
1.	No interfaces specified.
2.	The following interfaces not identified within the Certificate Holder's manual system:
3.	Interfaces listed are inaccurate.
4.	Specific location of interfaces not identified within the manual system.
5.	Other

## SAI SECTION 5 - MANAGEMENT RESPONSIBILITY & AUTHORITY ATTRIBUTES

**Objective:** The questions in this section of the DCT address the responsibility and authority of the process. They are designed to assist the inspector in determining if there is a clearly identifiable, qualified, and knowledgeable person who is responsible for the process, is answerable for the quality of the process, and has the authority to establish and modify the process. (The person with the authority may or may not be the person with the responsibility.)

### Tasks

	To meet this objective, the inspector must accomplish the following tasks:
1.	Identify the person who has overall responsibility for the Lower Landing Minimums (LLM) process.
2.	Identify the person who has overall authority for the Lower Landing Minimums (LLM) process.
3.	Review the duties and responsibilities of the person(s), documented in the certificate holder's manual.
4.	Review the appropriate organizational chart.

### Questions

	To meet this objective, the inspector must answer the following questions:	
1.	Does the certificate holder's manual clearly identify who is responsible for the quality of the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain Name/Title:
2.	Does the certificate holder's manual clearly identify who has authority to establish and modify the policies, procedures, instructions, and information for the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain Name/Title:
3.	Does the certificate holder's manual include the duties and responsibilities of those who manage the work required by the Lower Landing Minimums (LLM) process? SRRs: 121.135(b)(2)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
4.	Does the certificate holder's manual include instructions and information for those who manage the work required by the Lower Landing Minimums (LLM) process? SRRs: 121.135(a)(1)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
5.	Does the certificate holder's manual clearly and completely document the responsibility for this position?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
6.	Does the certificate holder's manual clearly and completely document the authority for this position?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
7.	Does the certificate holder's manual clearly and completely document its qualification standards for the person having responsibility for the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
8.	Does the certificate holder's manual clearly and completely document its qualification standards for the person having authority to establish and modify the certificate holder's policies, procedures, instructions, and information for the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
9.	Does the certificate holder's manual clearly and completely document the procedures for delegation of authority for the Lower Landing Minimums (LLM)	<input type="checkbox"/> Yes

	process?	<input type="checkbox"/> No, Explain
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<b>SAI SECTION 5 - MANAGEMENT RESPONSIBILITY &amp; AUTHORITY ATTRIBUTES</b> <b>Drop-Down Menu</b>	
1.	Not documented.
2.	Documentation unclear.
3.	Documentation incomplete.
4.	Other.